



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,012	12/05/2001	Hiroshi Sekine	XA-9591	3034

7590 04/01/2003

Miles & Stockbridge P.C.  
Suite 500  
1751 Pinnacle Drive  
McLean, VA 22102-3833

EXAMINER

BINDA, GREGORY JOHN

ART UNIT	PAPER NUMBER
----------	--------------

3679


DATE MAILED: 04/01/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. <b>10/002,012</b>	Applicant(s) <b>Sekine</b>
Examiner <b>Greg Binda</b>	Art Unit <b>3679</b>



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Feb 25, 2003
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above, claim(s) 1-3, 6, and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4 and 5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Dec 5, 2001 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.

- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                    | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). <u>5, 6</u> | 6) <input type="checkbox"/> Other:  |

Art Unit: 3679

*Election/Restriction*

1. Applicant's election without traverse of Species IX (shown in Fig. 10) in Paper No. 8 is acknowledged.
2. Claims 1-3; 6 & 7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 8.

*Drawings*

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because each of reference numerals 3, 5-7, 10 & 12 is used to identify a part in an embodiment and a modification of such part in one or more subsequently disclosed embodiments. Such usage is proscribed. See also MPEP 608.02(e).
4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

*Specification*

Art Unit: 3679

5. The disclosure is objected to because page 19, line 24 includes the nonsensical phrase "the noises occurs".

6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

*Claim Rejections - 35 U.S.C. § 112*

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 4 & 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 4, lines 3 & 4 recites the conditional phrase "a possible". Thus the limitation, "oscillating manner," succeeding this phrase is premised on a condition which may or may not exist. Therefore those limitations are indefinitely recited making the claim indefinite and ambiguous.

b. The term "extreme" in claim 5 is a relative term which renders the claim indefinite. The term "extreme" is not defined by the claim, the specification does not provide a standard for

Art Unit: 3679

ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

*Claim Rejections - 35 U.S.C. § 103*

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 4 is rejected under 35 U.S.C. 102<sup>3(a)</sup>(b) as being <sup>unpatentable</sup> anticipated by Kayser, US 3,138,942.

Figs. 1 & 2 show a cross joint comprising: yokes (see "furcation of a universal joint" in col. 2, lines 67 & 68) each formed with a bearing hole (see "openings" in col. 1, line 13); a spider shaft 14 fitted into the bearing hole through a needle bearing 22, 24; and rollers 24 provided in a bearing cup 22 of the needle bearing. In col. 2, lines 65-68, the needle bearing 22, 24 is disclosed as being "secured in suitable manner" to the spider shaft 14. In col. 3, lines 34-37, Kayser suggests that a suitable manner for a secured connection is an interference fit. In col. 3, lines 62-65, the rollers 24 are disclosed as axially movable, but Kayser does not expressly disclose the amount of movement be equal to 0.6 mm or larger. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the amount of movement be equal to 0.6 mm or larger, since it has been held that where the general conditions

Art Unit: 3679

of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Killing*, 895 F.2d 1147, 14 USPQ2d 1056.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kayser as applied to claim 4 above, and further in view of Takabe, US 2001/0007832. In col. 2, lines 3-7, Kayser discloses that a lubricating agent fills the interior of the needle bearing 22, 24, but Kayser does not expressly disclose that an extreme-pressure additive is added to the lubricating agent. In paragraphs 0011-0013, Takabe discloses adding an extreme-pressure additive to a lubricating agent in order to provide a lubricating agent that will exhibit durability under severe conditions, will keep suitable hardness with little change in consistency at high temperature, and exhibit better water resistance compared with other lubricants. It would have been obvious to one of ordinary skill in the art to modify the cross joint of Kayser by adding an extreme-pressure additive to the lubricant in order to provide a lubricating agent that will exhibit durability under severe conditions, will keep suitable hardness with little change in consistency at high temperature, and exhibit better water resistance compared with other lubricants.

#### *Conclusion*

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mangiavacchi discloses in col. 2, lines 31-33, an oscillating manner. Burns et al discloses in col. 4, lines 28-31, a bearing cup 36 that is press-fitted into a bearing hole 28. Keller

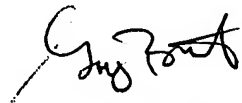
Art Unit: 3679

and Lange et al each show a cross joint with a pin disposed in the recess of a trunnion. In col. 4, lines 62-68, Sindelar disclose rollers structured to be axially movable.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached Monday through Thursday from 9:30 am to 7:00 pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne, can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 (before final), (703) 872-9327 (after final) and (703) 872-9325 (customer service).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.

  
**GREGORY J. BINDA**  
**PRIMARY EXAMINER**